

IN THE CLAIMS

Claims 1 - 10 (Cancelled)

11. (Currently Amended) A fixture shaped and configured to be screwed firmly
2 into bone tissue, said fixture comprising:

3 a generally cylindrical anchoring portion formed with an insertion end and having an
4 external screw thread, a cavity which opens out at said insertion end, and a plurality of
5 through-penetrating slots extending from said insertion end, wherein each said slot connects
6 the cavity with the outside of said anchoring portion and wherein each said slot is defined by
7 a leading slot wall surface facing each said slot and a trailing slot wall surface facing each
8 said slot, where said leading and trailing wall surfaces relate to the direction of rotation
9 defined by said screw thread when screwing in the fixture, such that said leading slot wall
10 surface is the one that is ahead of each said slot and said trailing slot wall surface is behind
11 each said slot in said direction of rotation, wherein at least the radially outermost part of said
12 trailing slot wall surface defines a cutting edge at an angle α with the radial direction and
13 slopes obliquely forwardly from within and outwardly in said direction of rotation, whereby
14 the cutting edge formed between said at least the radially outermost part of said trailing slot
15 wall surface and the outside of said anchoring portion define an acute angle, and wherein
16 substantially all portions of said trailing slot wall slope obliquely forwardly from within and
17 outwardly in said direction of rotation, and wherein the portion of said anchoring portion that
18 lies between said trailing slot wall and said leading slot wall of the adjacent slot compresses
19 radially when the anchoring portion is screwed into bone tissue to resist distortion of the
20 shape of said anchoring portion.

12. (Previously presented) The fixture according to claim 11, wherein the whole
2 of the trailing slot wall surface defines the same angle α .

13. (Previously presented) The fixture according to claim 12, wherein said leading
2 slot wall surface also slopes obliquely forward from within and outward in said direction of
rotation.

14. (Previously presented) The fixture according to claim 13, wherein said leading
2 and trailing slot wall surfaces are parallel with one another.

15. (Cancelled)

16. (Previously presented) The fixture according to claim 12, wherein the angle α
2 is 20° - 40° at the radially outer end of the trailing slot wall surface.

17. (Previously presented) The fixture according to claim 13, wherein the angle α
2 is 20° - 40° at the radially outer end of the trailing slot wall surface.

18. (Previously presented) The fixture according to claim 14, wherein the angle α
2 is 20° - 40° at the radially outer end of the trailing slot wall surface.

19. (Previously presented) The fixture according to claim 11, wherein the angle α
2 is 27° - 33° at the radially outer end of the trailing slot wall surface.

20. (Previously presented) The fixture according to claim 12, wherein the angle α
2 is 27° - 33° at the radially outer end of the trailing slot wall surface.

21. (Cancelled)

22. (Previously presented) The fixture according to claim 12, wherein the slots are
2 3-10 in number.

23. (Previously presented) The fixture according to claim 11, wherein the slots are
2 3-10 in number.

24. (Previously presented) The fixture according to claim 11, wherein the slots are
2 5-7 in number.

25. (Previously presented) The fixture according to claim 12, wherein the slots are
2 5-7 in number.

26. (Previously presented) The fixture according to claim 13, wherein the slots are
2 5-7 in number.

27. (Previously presented) The fixture according to claim 11, wherein the cavity is
2 circular in cross-section and widens conically in a direction toward said insertion end.

28. (Previously presented) The fixture according to claim 12, wherein the cavity is
2 circular in cross-section and widens conically in a direction toward said insertion end.

29. (Previously presented) The fixture according to claim 13, wherein the cavity is
2 circular in cross-section and widens conically in a direction toward said insertion end.

30. (Previously presented) The fixture according to claim 11, wherein the slot
2 width at the radially outer end of said slot corresponds to 15-35% of the peripheral distance
between the two slots on the outside of the fixture.

31. (Previously presented) The fixture according to claim 12, wherein the slot
2 width at the radially outer end of said slot corresponds to 15-35% of the peripheral distance
between the two slots on the outside of the fixture.

32. (Previously presented) The fixture according to claim 13, wherein the slot
2 width at the radially outer end of said slot corresponds to 15-35% of the peripheral distance
between the two slots on the outside of the fixture.

33. (Previously presented) The fixture according to claim 27, wherein the slot
2 width at the radially outer end of said slot corresponds to 15-35% of the peripheral distance
between the two slots on the outside of the fixture.

34. (Previously presented) The fixture according to claim 11, wherein the fixture
2 is made of titanium.

35. (Cancelled)

36. (Previously presented) The fixture according to claim 11, wherein the angle α
2 is 20° - 40° at the radially outer end of the trailing slot wall surface.

37. (Currently Amended) A fixture shaped and configured to be screwed
2 longitudinally into hollow or tubular bone tissue, said fixture comprising:

a generally cylindrical anchoring portion formed with an insertion end and having an
4 external screw thread, a cavity which opens out at said insertion end, and a plurality of
through-penetrating slots extending from said insertion end, wherein each said slot connects
6 the cavity with the outside of said anchoring portion and wherein each said slot is defined by
a leading slot wall surface facing each said slot and a trailing slot wall surface facing each
8 said slot, where said leading and trailing wall surfaces relate to the direction of rotation
defined by said screw thread when screwing in the fixture, such that said leading slot wall
10 surface is the one that is ahead of each said slot and said trailing slot wall surface is behind
each said slot in said direction of rotation, wherein at least the radially outermost part of said
12 trailing slot wall surface defines a cutting edge at an angle α with the radial direction and
slopes obliquely forwardly from within and outwardly in said direction of rotation, whereby
14 the cutting edge formed between said at least the radially outermost part of said trailing slot
wall surface and the outside of said anchoring portion define an acute angle, and wherein
16 substantially all portions of said trailing slot wall slope obliquely forwardly from within and
outwardly in said direction of rotation, and wherein the portion of said anchoring portion that
18 lies between said trailing slot wall and said leading slot wall of the adjacent slot compresses
radially when the anchoring portion is screwed into bone tissue to resist distortion of the
20 shape of said anchoring portion.